

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

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5/24/02

In re Patent Application of

HIRSCH et al

Atty. Ref.: 4114-3

Serial No. to be assigned

Group: unknown

Filed: January 22, 2002

Examiner: unknown



For: METHOD AND DEVICE FOR THE AUTOMATIC  
RECOGNITION OF DISTORTED SPEECH DATA

\* \* \* \* \*

Assistant Commissioner for Patents  
Washington, DC 20231

Sir:

**INFORMATION DISCLOSURE STATEMENT**

As suggested by 37 C.F.R. 1.97, the undersigned attorney brings to the attention of the Patent and Trademark Office the references listed on the attached form PTO-1449, a copy of each of which is enclosed. The attached form PTO-1449 is based on a European Search Report mailed March 29, 200, a copy of which is attached, with respect to this disclosure.

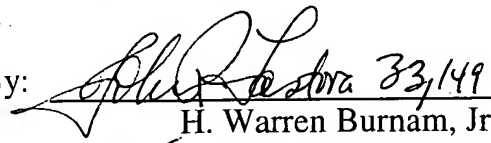
Official citation and consideration of all the attached documents is requested. Please return to the undersigned a copy of the attached PTO-1449 with the examiner's initials in the left column [MPEP §609] with the next communication.

The filing of an Information Disclosure Statement shall not be construed as a representation that a search has been made [37 C.F.R. § 1.97(g)], an admission that the information cited is, or is considered to be, material to patentability or that no other material information exists. Further, the filing of an Information Disclosure Statement shall not be construed as an admission against interest in any manner [Commissioner's Notice of January 9, 1992, 1135 O.G. 12-25 at 25].

Respectfully submitted,  
NIXON & VANDERHYE P.C.

January 22, 2002

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**INFORMATION DISCLOSURE  
CITATION**

(Use several sheets if necessary)

ATTY. DOCKET NO.

4114-3

APPLICANT

HIRSCH et al

FILING DATE

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**U.S. PATENT DOCUMENTS**

*EXAMINER INITIAL	DOCUMENT NUMBER	DATE	NAME	CLASS	SUBCLASS	FILING DATE IF APPROPRIATE
	5,732,388	3-1998	HAUENSTEIN et al.			

**FOREIGN PATENT DOCUMENTS**

DOCUMENT	DATE	COUNTRY	CLASS	SUBCLASS	TRANSLATION YES NO
25 06 771 A	8-1976	DE			X
0 660 300 A1	6-1995	EP			

**OTHER DOCUMENTS (including Author, Title, Date, Pertinent pages, etc.)**

	Hirsch, "Adaptation of HMS in the Presence of Additive and Convolutional Noise", 1997 IEEE Workshop on Automatic Speech Recognition and Understanding Proceedings (Cat. No. 97 <sup>TH</sup> 8241), Santa Barbara, CA, 14-17 December 1997, pp. 412-419
	Han et al, "Robust Telephone Speech Recognition Based on Channel Compensation", Pattern Recognition, US, Pergamon Press Inc., Elmsford, NY, vol. 32, no. 6, June 1999, pp. 1061-1067
	Reynolds, "Experimental Evaluation of Features for Robust Speaker Identification", IEEE Transactions on Speech and Audio Processing, Oct. 1994, USA, vol. 2, no. 4, pp. 639-643
	Gong, "Speech Recognition in Noisy Environments: A Survey", Speech Communication, vol. 16, 1995, pp. 264-269
	Mauuuary, "Blind Equalization in the Cepstral Domain for Robust Telephone Based Speech Recognition", Proc. of the Eusipco Conference, Rhodes, Greece, 1998, pp. 359-362

*Examiner	Date Considered
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Examiner: Initial if reference considered, whether or not citation is in conformance with MPEP 609; Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to application.

Form PTO-FB-A820 (Also PTO-1449)